

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 1. (currently amended) A radio communications apparatus
2 having a transmission power control feature for controlling
3 the transmission power of a local station by using a
4 transmission power control bit transmitted from a distant
5 station to the local station, comprising:

6 communication state detector which detects a
7 communication state based on the reception power of
8 a received signal transmitted from the distant
9 station; and

10 transmission power control step range changer which
11 changes a transmission power control step range
12 corresponding to the transmission power control bit
13 based on the detected communication state.

1 2. (original) The radio communications apparatus
2 according to claim 1, wherein said communication state
3 detector has a reception power change detector which detects a
4 change in reception power in a local station.

1 3. (original) The radio communications apparatus
2 according to claim 1, wherein said communication state
3 detector has a distant station transmission power change
4 detector which detects a change in transmission power in a
5 distant station.

1 4. (original) The radio communications apparatus

2 according to claim 1, wherein said communication state
3 detector has a control state detector which detects the
4 control state of the local station.

1 5. (original) The radio communications apparatus
2 according to claim 1, wherein said communication state
3 detector has a local station transmission power change
4 detector which detects a change in transmission power in the
5 local station.

1 6. (original) The radio communications apparatus
2 according to claim 1, wherein said communication state
3 detector has a transmission power control bit change detector
4 which detects a change in said transmission power control bit.

1 7. (original) The radio communications apparatus
2 according to claim 2, wherein said reception power change
3 detector has a reception power comparator which compares a
4 previous reception power with a current reception power.

1 8. (original) The radio communications apparatus
2 according to claim 2, wherein said reception power change
3 detector has a fading pitch detector which detects the fading
4 pitch of reception power

1 9. (original) The radio communications apparatus
2 according to claim 2, wherein said reception power change
3 detector has a reception power threshold comparator which
4 compares the reception power with a predetermined threshold.

1 10. (currently amended) A transmission power control
2 method for a radio communications apparatus for controlling

3 transmission power of a local station by using a transmission
4 power control bit transmitted from a distant station to the
5 local station, comprising:

6 a communication state detecting step which detects the a
7 communication state based on the reception power of
8 a received signal transmitted from the distant
9 station; and

10 a transmission power control step range changing step
11 which changes a transmission power control step
12 range corresponding to the transmission power
13 control bit based on the detected communication
14 state.

1 11. (original) The transmission power control method for
2 radio communications apparatus according to claim 10, wherein
3 said communication state detecting step has a reception power
4 change detecting step which detects a change in reception
5 power in a local station, wherein said transmission power
6 control range changing step changes the transmission power
7 control range depending on the detected change in reception
8 power.

1 12. (currently amended) The transmission power control
2 method for radio communications apparatus according to claim
3 10, wherein

4 said communication state detecting step has a distant
5 station transmission power change detecting step
6 which detects a change in transmission power in a
7 distant station and a reception power change
8 detecting step which detects a change in reception
9 power in a local station, wherein

10 said transmission power control step range changing step
11 changes the transmission power control step range
12 depending on the detected change in transmission
13 power in the distant station and the detected change
14 in reception power in the local station.

1 13. (currently amended) The transmission power control
2 method for radio communications apparatus according to claim
3 10, wherein

4 said communication state detecting step has a control
5 state detecting step which detects the control state
6 of a local station, wherein
7 said transmission power control step range changing step
8 changes the transmission power control step range
9 depending on the detected control state.

1 14. (currently amended) A transmission power control
2 method for radio communications apparatus according to claim
3 10, wherein

4 said communication state detecting step has a local
5 station transmission power change detecting step
6 which detects a change in transmission power in a
7 local station and a transmission power control bit
8 change detecting step which detects a change in the
9 transmission power control bit, wherein
10 said transmission power control step range changing step
11 changes the transmission power control step range
12 depending on the detected change in transmission
13 power in the local station and the detected change
14 in the transmission power control bit.

1 15. (original) The transmission power control method for
2 radio communications apparatus according to claim 11 or 12,
3 wherein

4 said reception power change detecting step has a
5 reception power comparing step which compares a
6 previous reception power with a current reception
7 power, wherein
8 a change in reception power is detected based on the
9 comparison results of the reception power comparing
step.

1 16. (original) The transmission power control method for
2 radio communications apparatus according to claim 11 or 12,
3 wherein

4 said reception power change detecting step has a fading
5 pitch detecting step which detects the fading pitch
6 of reception power, wherein
7 a change in reception power is detected based on the
8 detected fading pitch.

1 17. (original) The transmission power control method for
2 radio communications apparatus according to claim 11 or 12,
3 wherein

4 said reception power change detecting step has a
5 reception power comparing step which compares a
6 previous reception power with a current reception
7 power and a fading pitch detecting step for
8 detecting the fading pitch of reception power,
9 wherein
10 a change in reception power is detected based on the
11 comparison results of the reception power comparing
12 step and the detected fading pitch.

1 18. (original) A transmission power control method for
2 radio communications apparatus according to claim 11 or 12,
3 wherein

4 said reception power change detecting step has a
5 reception power threshold comparing step for
6 compares the reception power with a predetermined
7 threshold, wherein
8 a change in reception power is detected based on the
9 comparison results of the reception power threshold
10 comparing step

1 19. (previously presented) A computer-readable recording
2 medium for storing a program for use by a computer for
3 executing the transmission power control method for the radio
4 communications apparatus according to any one of claims 10
5 through 18.